



European Tyre and Rim Technical Organisation

NHTSA
Docket Management
Room PL-401
400 Seventh Street, S.W.
Washington, DC 20590
USA

Brussels, 18 February 2002
TAL 077-02-ETR-NHTSA-TIRE SAFETY INFO

Dear Sirs,

**Subject : Docket No NHTSA 01-11157
ETRTO Comments on the Notice of Proposed Rulemaking for “Tire
safety Information” issued by NHTSA as per Federal Register
Notice of December 19, 2001**

Please find attached the ETRTO comments on the Notice of Proposed Rulemaking on Tire Safety Information issued by NHTSA as per Federal Register Notice of December 19, 2001.

Yours Faithfully,

Léon Chession
Secretary General

Attachment



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ATTACHMENT TO TAL077-02-ETR-NHTSA-TIRE SAFETY INFO

Docket No. NHTSA 01-11157

**ETRTO comments
on the NHTSA Notice on Proposed Rulemaking for 'Tire Safety Information'
(docket 01-11157)**

The proposed rulemaking contains the following proposals:

- a) Modify FMVSS 110 by extending it to motor vehicles with GVWR up to 10000 lbs and by specifying the format, the location and the information to be added to the vehicle placard
- b) Replace FMVSS 109 and part of FMVSS119 (only for tyres up to load range E for the equipment of vehicles with a GVWR up to 10000lbs) with a new FMVSS 139
- c) Modify the format and the lettering height of FMVSS part 574 'tire identification and record keeping
- d) Modify part 575 'consumer information regulation'

ETRTO offers the following comments to the proposed requirements, highlighting the fact that tyres are not developed to suit one specific market only, but they are designed following a global approach in order to be suitable for given vehicle performances, independently of the regions of the world where that vehicle is used:

A) FMVSS 110

The requirements specify the location, the format and the lettering of the vehicle placard and of a new 'tire inflation pressure label'. The first placard is depicted in figure 1 and the second label is depicted in figure 2.

In both cases the height of the lettering shall be not less than 2.4 millimetres.



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Comments to Figure 1 (Vehicle placard)

- the internationally recognised symbol for the inflation pressure shall read “kPa” and not “KPA”
- in the preamble (page 65555 first column) it is argued to replace the term ‘vehicle capacity weight’ with ‘passenger and cargo weight’ in order to be easily understandable by the public; however the last but one line of the example still reads: “up to vehicle capacity weight”. In our opinion there shall be consistency amongst the various wordings.

Comments to Figure 2 (Tire Inflation Pressure Label)

- the internationally recognised symbol for the inflation pressure shall read “kPa” and not “KPA”
- the minimum size of the lettering for the tyre size designation and for the values of the cold tyre inflation pressure are specified as 2.4 millimetres minimum; however the preamble (page 65552 first column) is amply debates on the necessity for important information to be “easier for consumers to read and understand” “particularly for individuals with visual impairment” and therefore the suggestion is for a size at least equivalent of Times New Roman font size 20 . The information on recommended tyre inflation pressure is vital for safety and hopefully shall be consulted at least monthly by all consumers. Therefore, why will the agency prevent ‘visual impaired’ consumer from reading that essential information ?

COMMENTS TO PARAGRAPH S.4.3.1

The example shows an inconsistency with reference to equivalence of the units of pressure: in fact 36 psi equates both 240 and 245 kPa. The correct equivalence is 36 psi = 248.22 kPa to be rounded correctly to 250 kPa

In addition the paragraph states “ ..shall show the size designation and, if applicable, the type designation of rims (not necessarily those on the vehicle) appropriate for the tyre appropriate for use on that vehicle including the tyre installed as original equipment on the vehicle by the vehicle manufacturer...”. The proper matching of tyres with suitable rims is a must for safety therefore why not to specify the correct and complete designation of the rim ‘installed’ on the vehicle ?

To this purpose the example is wrong twice, as the rim designation suitable for tyre size P265/70R16 according to all international standards organisations shall read ‘16x8 J’



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A) FMVSS 139

Paragraph S5.5 specifies the markings to be shown on the tyre sidewalls “in letters and numerals not less than 0.078 inch high” (approximately 2 millimetres).

Some to be shown on both sidewalls, such as

- items a) and b) to be in conformity with part 574
- item c) the tyre size designation
- item d) the maximum permissible inflation pressure
- item e) the maximum load rating

Others to be shown on one sidewall only, such as

- item f) the generic name of the materials
- item g) the actual number of plies
- item h) the word ‘tubeless’ as applicable
- item i) the word ‘radial’ if applicable.

From the preamble these last markings are considered of no importance for the customer but only for some specialists as the retreaders.

However item h) is very important for the consumers because it identifies the tyre as one that does, or not, need to be fitted with a tube.

Moreover item i) is in all effects redundant as according to all international standards organisations radial tyres are marked with the letter ‘R’ inside the tyre size designation requested by item c).

Comments to items a) and b)

Both refer to part 574. In essence the requirement is to stamp the TIN on both sidewalls with a lettering of at least 6 mm.

That revision will require all existing production moulds, for Passenger Car tyres and for Light Truck tyres, to be reworked world-wide, with an estimated average cost of 600 USD per mould, plus additional costs for redrafting, loss of production, logistic, reprogramming of computer systems and the very short time schedule, compared with the availability of competent workshops.

As drafted, this Regulation (574.5) however will also apply to all highway tyres, including tyres for Vans, Trucks, Buses, Trailers and Motorcycles. If maintained as proposed, the requirement will then double the number of moulds concerned.

It can be estimated that, world-wide, the total number of moulds to be modified is therefore in the order of 230.000 to 250.000 units.

Thus the physical rework of existing production moulds, alone, will generate an extraordinary expenditure of more than 150 million USD, not including the additional costs.



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Incidentally we wonder from which source did the agency derive the unrealistic figure of 8 (sic !) manufacturers of new tyres concerned world wide as estimated on the second column of page 65559.

All comments already supplied by tyre manufacturers associations (item 2 a on page 65544) are still valid. According to some 'Unions', for reasons of safety of the workers, the change of plugs on both sides of the moulds, and especially on the upper sidewall, can only be performed when the mould is at ambient temperature, which will request the mould to be dismantled from the press, cooled down, dismantled, modified, reassembled, remounted on the press and reheated. This operation will require from 6 to 8 hours, depending on the type of moulds and presses, with corresponding loss of production. That will generate, **yearly**, an additional permanent cost, due to the loss of production that can be estimated on average to 1 shift per production week for every press, which in total is exceeding 220 million USD.

Therefore we cannot share the optimistic estimation of .01 USD per tyre as exposed on page 65558.

Due to the very high cost of the first massive change of all moulds, to be concentrated in less than one year, the permanent added cost for loss of production and for additional workers to manage the weekly revision of moulds this amendment, by itself, will clearly increase the cost of tyres to US customers; in fact it seems unreasonable to charge an additional cost to customers in other regions only because of the specific requirements of one single administration.

COMMENTS TO S 5.5.3 – 'MAXIMUM LOAD RATING'

The requirement of item e), as above specified, is important for the correct choice of the tyre suitable for the vehicle.

However the specifications of item S5.5.3 b) only refer to passenger car tyres assuming another non specified system for light truck tyres and moreover they are inappropriate.

International standards and ECE regulations 30 and 54 require that the 'tire maximum load rating be identified by a Load Index' and to this purpose the size designation, in both the Vehicle Label and the tyre Inflation Pressure Label (proposed in FMVSS 110), is supplemented by the 'service description' (load index and speed symbol) suitable for the vehicle 'combined weight of occupants and cargo'. That is the only information the consumer will receive. Nowhere the consumer can find the maximum load acting on the single tyre so as to properly choose an adequate replacement tyre. The preamble (page 65557, second column) states "It is apparent, therefore, that maximum harmonisation of tyre requirements would benefit both the US and foreign vehicle and tyre manufacturers'.



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A large percentage of tyres manufactured all over the world, as well as a remarkable amount of those sold in the US, are already marked with the said 'service description' in conformity with ECE regulations 30 or 54.. Further on the same column is stated that "The load index on the sidewall of the tire, provides a value that is not intuitive to consumer and would require a vehicle operator to look to owner's manual or standards to determine the actual maximum load". We object that statement because when the 'service description' will be legally required on tyres sold in the US the 'vehicle operator' will only be required to read the 'Vehicle placard' or the 'Tire Inflation Pressure Label' and select a replacement tyre having a Load Index value 'higher or equal to that specified by the vehicle manufacturer' as well as a Speed Symbol 'higher or equal to that specified by the vehicle manufacturer'.

Only thus the consumer can operate an informed choice of the suitable tyre to be fitted to the vehicle. A maximum load in clear on the contrary is of no use because to the consumer cannot retrieve elsewhere the necessary information for the appropriate choice.

Inquisitive people interested, for academic reasons, to know the equivalence of a given load index with a given load in pounds or in kg, they can obtain their information from the existing standards or from the "Owner's manual" where the vehicle manufacturer shall, according to item 6 (a)(4)(i) of Part 575, "provide the purchaser" "in writing in the English language and not less than 10 point type a discussion of ..." "(i) tyre labelling, including a description and explanation of each marking on the tyres provided with the vehicle".

COMMENTS TO S5.5.3 AND 5.5.4 – 'MAXIMUM PERMISSIBLE INFLATION PRESSURE'

The two paragraphs have their interest only as far as the safety of the users inflating their own tyres with uncontrolled means is concerned in order to avoid them inflating a tyre to extreme values until it burst, but those have no relation to the 'actual cold inflation pressure' recommended for the service on a given vehicle. However the value marked on the tyre shall have to be properly identified as 'maximum permissible', so as to avoid confusing the consumer.

In addition S5.5.3 only concerns passenger car tyres and does not necessarily include light truck tires.

Moreover S5.5.4 is misleading as, in actual facts, it applies only for reduced volume spare tyres, but literally it may also concern light truck tyres where reference pressures is 60 psi, as their field of applicable pressures is comprised between 35 and 80 psi.

A) Part 574 – 'tire identification and record keeping'

The new requirement is to modify the TIN as follows (derived from figure 1):

- the first group, of two symbols, to identify the manufacturer plant (as in the present requirement)
- the second group, of four digits, to identify the date of production (at present is the fourth group)



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- the third group, of 5 symbols in the drawing (optional) and left to the discretion of the tyre manufacturer
with a minimum lettering of 1/4" (6 mm)

Comments

Paragraph 574.5 only modifies the second (sub item b) and the fourth grouping (sub item d); does it mean that sub item c) of present paragraph 574.5 remains unchanged ?

In that case how will it conciliate with the drawing in figure 1 ?

Item d) dealing with the fourth group, not shown in the drawing, quotes additional 2 symbols to identify the tyre size. Where shall it be placed ?

A production date code, similar to that required by Part 574, is also specified by other national and international regulations such as UN/ECE regulation 30, UN/ECE regulation 54, China, Saudi Arabia, Brazil, etc.

When the date code is positioned at the end of the TIN, as it is with the present requirements, this can be deemed to be also in conformity with those regulations, but if the date code will be hidden amongst other codes, as proposed for the new TIN, it will be extremely difficult to identify it as a date code which conforms to other regulations.

To the limit it would then be required to have an additional separate date code in order to conform to other regulations and this is clearly contrary to any spirit of worldwide harmonisation.

It is required to stipulate a minimum lettering of 6 mm to make it easier for 'the individuals with visual impairment' to read the TIN in case of a recall. It is also stated in the first column of page 65552 that additional useful information such as the trade description and tyre size are already marked elsewhere on the tyre sidewall. In fact FMVSS 139 paragraphs S5.5.c) and S5.5.1 require that the tyre size designation and the name of the manufacturer be marked, but with lettering having a minimum height of 2mm.

As the recent cases show most recalls are referred to one tyre size in some 'trade descriptions'. With the present requirement therefore 'the individuals with visual impairment' will perfectly read the plant code and the date of manufacture, but will undoubtedly miss the most important information to decide whether their tyres are concerned or not. Therefore in our opinion all pieces of information shall be accessible with the same probability to be read.

Part 574 as it stands now, includes also tyres for Trucks, Buses and Motorcycles.

Though the preamble only addresses to tyres for Passenger Cars and Light Trucks the amendment does not reflect the same restriction. It shall therefore be considered the extreme difficulty deriving from the requirement of increasing the lettering for all motorcycle



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tyres from 4 mm (now required) to 6 mm due to the limited space available on the tyre sidewalls of those tyres.

Another reason for rejecting the proposed rearrangement of the TIN is that all Data Base will have to be revised and for at least 10 years there will be on the market tyres which conform to two completely different sets of information thus increasing the confusion of the customer.

Request for comments on Particular Issues (item VII page 65557)

- 1) as 49 USC 30123 c) refers to 'Maximum load standards' NHTSA shall specify the 'maximum luggage capacity' and not a 'reasonable amount of luggage' otherwise they will legalise the possibility of overloading, thus assuming any responsibility for such misuse.
- 2) Complete harmonisation of labelling requirements with those of ECE regulations 30 and 54 are essential. We consider useless to detail on specific labelling requirements as they are known world-wide and directly accessible through the ECE/UN website. Most of other foreign national requirements already refer to those labelling as mandatory. The safety impact are self explaining as those marking supply a complete description of the performance characteristics of the tyre and therefore allow all information necessary for an informed choice of replacement tyres.
- 3) Would the agency prohibit marking of all information not required by FMVSS139 in its present format will set a technical barrier to importation of tyres not based on their safety, but just because conforming to a foreign legal requirement, which could bring to counter actions from other countries banning tyres marked DOT.